

**REMARKS**

This Amendment and Response to Final Office Action is being submitted in response to the final Office Action mailed October 29, 2007. Claims 1-22 are pending in the Application. Claims 1, 5, and 9 are the independent claims.

Claims 1, 5, and 9 are objected to because of informalities.

Claims 1-22 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

Claims 1-2, 12-14, and 20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Juniper (“Juniper Networks M40 Internet Backbone Router Inter-Operating With the CIENA MultiWave Sentry DWDM System”) in view of the admitted prior art, Waschka, Jr. (U.S. Patent No. 4,449,247), Bach *et al.* (U.S. Patent No. 6,606,354), and Hoogerbrugge (“Optimizing test strategies for SONET/SDH/ATM network element manufacturing”).

Claims 3-11, 15-19, and 21-22 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Juniper in view of the admitted prior art, Waschka, Jr., Bach, and Hoogerbrugge as applied to Claim 1, and in further view of Bullock *et al.* (U.S. Patent No. 5,764,651).

In response to these rejections, Claims 1, 5, and 9 have been amended herein to further clarify the subject matter which Applicants regard as their invention, without prejudice or disclaimer to continued examination on the merits. These amendments are fully supported in the Specification, Drawings, and Claims of the Application and no new matter has been added. Based upon the amendments, reconsideration of the Application is respectfully requested, without further search, in view of the following remarks.

**Claims 1, 5, and 9 – Objection**

Claims 1, 5, and 9 are objected to because of informalities. In response to this objection, Applicants have amended each of Claims 1, 5, and 9 to recite “each performance

monitor.” In Claim 5, Applicants have removed “without.” In Claim 9, Applicants have added “signal.” Therefore, Applicants respectfully request withdrawal of this objection.

**Claims 1 - 22 – §112, first paragraph, Rejection**

Claims 1-22 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. In response to this rejection, Applicants have amended Claims 1, 5, and 9 as suggested by the Examiner in the Final Office Action. Therefore, Applicants respectfully request withdrawal of this rejection.

**Claims 1-2, 12-14, and 20 - §103(a) Rejection – Juniper, APA, Waschka Jr., Bach *et al.*, and Hoogerbrugge**

Claims 1-2, 12-14, and 20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Juniper (“Juniper Networks M40 Internet Backbone Router Inter-Operating With the CIENA MultiWave Sentry DWDM System”) in view of the admitted prior art, Waschka, Jr. (U.S. Patent No. 4,449,247), Bach *et al.* (U.S. Patent No. 6,606,354), and Hoogerbrugge (“Optimizing test strategies for SONET/SDH/ATM network element manufacturing”).

Each diagnostic signal provides a mechanism to determine a bit error rate for each individual span. Without the diagnostic signal disclosed by Applicants, BER testing would provide a single BER for all N cascaded channels with no mechanism for fault isolation. According, each of the diagnostic signals indicates a number of bit errors which were produced from a first optical transmitter up to and including a corresponding optical transmitter of the each of the diagnostic output signals. Applicants have amended Claims 1, 5, and 9 to include this limitation with respect to the diagnostic signals. This enables per span BER using a single test signal in a cascaded configuration.

Claims 1 and 5 have been amended to include the limitation of:

wherein each of the plurality of transmitter diagnostic output signals and each of the plurality of receiver diagnostic signals indicates a number of bit errors which were produced from the first optical transmitter up to and including a corresponding optical transmitter of the each of the plurality of transmitter diagnostic output signals.

Claim 9 has been amended to include the limitation of:

wherein each of the diagnostic signals indicates a number of bit errors which were produced from a first optical transmitter up to and including a corresponding optical transmitter of the each of the diagnostic output signals.

Applicants respectfully submit that the combination of Juniper, Waschka, Jr., APA, Bach *et al.*, and Hoogerbrugge do not teach or suggest using the diagnostic signals in this manner to isolate BER for each of N channels.

Therefore, Applicants respectfully submit that the rejection of Claims 1-2, 12-14, and 20 under 35 U.S.C. §103(a) has been traversed, and respectfully request withdrawal of this rejection.

**Claims 3-11, 15-19, and 21-22 - §103(a) Rejection – Juniper, APA, Waschka Jr., Bach *et al.*, Hoogerbrugge, and Bullock *et al.***

Claims 3-11, 15-19, and 21-22 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Juniper in view of the admitted prior art, Waschka, Jr., Bach, and Hoogerbrugge as applied to Claim 1, and in further view of Bullock *et al.* (U.S. Patent No. 5,764,651). The amendments and remarks with regard to Claims 1, 5, and 9 apply with equal force here. Therefore, Applicants respectfully submit the rejection has been traversed, and respectfully request withdrawal of this rejection.

**CONCLUSION**

Applicants would like to thank Examiner for the attention and consideration accorded the present Application. Should Examiner determine that any further action is necessary to place the Application in condition for allowance, Examiner is encouraged to contact undersigned Counsel at the telephone number, facsimile number, address, or email address provided below. It is not believed that any fees for additional claims, extensions of time, or the like are required beyond those that may otherwise be indicated in the documents accompanying this paper. However, if such additional fees are required, Examiner is encouraged to notify undersigned Counsel at Examiner's earliest convenience.

Respectfully submitted,

Date: December 29, 2007

/Christopher L. Bernard/  
Christopher L. Bernard  
Registration No.: 48,234

Lawrence A. Baratta Jr.  
Registration No.: 59,553

Attorneys for Applicants

**CLEMENTS | BERNARD | MILLER**  
1901 Roxborough Road, Suite 300  
Charlotte, North Carolina 28211 USA  
Telephone: 704.366.6642  
Facsimile: 704.366.9744  
[cbernard@worldpatents.com](mailto:cbernard@worldpatents.com)